What is claimed is:

1. A method for providing control variables (a_m, a_b) for guiding a motor vehicle as a function of input quantities (V, el, ek, di vri, φi), which represent the traffic situation, and as a function of dynamically changeable parameters,

wherein a single evaluation quantity (g) is formed from a set of a plurality of input quantities, and a plurality of the parameters are determined on the basis of the same evaluation quantity.

2. The method as recited in Claim 1,

wherein the input quantities include location data (di, vri, φi) of located objects, in particular of other vehicles, and the method is used to provide control variables for adaptive speed control of the vehicle.

3. The method as recited in Claim 2,

wherein a parameter selected on the basis of the evaluation quantity (g) relates to the selection of a target object from a plurality of located objects.

4. The method as recited in Claim 3,

wherein an object-specific evaluation quantity (gi) is formed for each of a plurality of located objects on the basis of location data (di, vri, φi) for the corresponding object, and the object for which the evaluation quantity (g) is greatest is selected as the target object.

5. The method as recited in one of Claims 2 through 4, wherein the evaluation quantity (g) is monotonically dependent on the object distance (di) and monotonically dependent on the relative speed (vri) of a located object.

6. The method as recited in one of Claims 2 through 5, wherein the evaluation quantity is determined on the basis of a multi-dimensional characteristic map (40) from the set of input quantities.

7. The method as recited in Claim 6,

wherein the characteristic map (40) is divided into at least two zones, which correspond to the different ranges of the object distance (d), and in which the evaluation quantity (g) is calculated according to different functions, and these functions continuously merge at the border (d0) between the zones.

8. The method as recited in one of the preceding claims, wherein at least one of the parameters determined on the basis of evaluation quantity (g) is a parameter that determines how fast and/or to what extent changes in the input quantities are reacted to by changing the control variables (a_m, a_b).

9. The method as recited in Claim 8,

wherein at least one of the parameters determined on the basis of the evaluation quantity (g) is a filter parameter for filtering one of the input quantities.

10. A device for providing control variables (a_m, a_b) for guiding a motor vehicle, having a control unit (10), which receives input quantities representing the traffic situation from sensors (14, 16, 18, 20) and which calculates the control variables from these input quantities and outputs them to control elements (30, 32) of the drive system, and optionally of the brake system of the vehicle,

wherein the control unit (10) is configured for implementing the method as recited in one of Claims 1 through 9.